DOCUMENT RESUME

ED 208 517 EA 014 062

AUTHOR Hentschke, Guilbert; Wagielski, John
TITLE Fiscal Strain in an Era of Retrenchment.
PUB DATE Apr 81
NOTE 29p.; Paper presented at the Annual Meeting of the American Educational Research Association (Los Angeles, CA, April 13-17, 1981).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Costs; *Declining Enrollment; Economic Factors; *Educational Resources; Elementary Secondary Education; *Financial Problems; *Inflation (Economics); Models; Retrenchment

ABSTRACT

Preliminary results of a three-year study of fifteen school districts indicate that fiscal strain results from both "intended" and "unintended" factors. The authors construct a model of fiscal strain that combines budget constraints with school district decision-makers' preference functions and indifference curves. Using this model and 1976 and 1980 data from one school district, they analyze the three causes of fiscal strain, including price increases, changes in educational resources and technology, and enrollment decline (which increases per-pupil costs, reduces staff-pupil ratios, and causes salary and district wealth bracket creep). The greatest factor affecting the district's fiscal strain is found to be price increases. Enrollment declines show little or no causal effect on fiscal strain, while technological changes account for an intermediate proportion of the strain. Price and enrollment changes are unintended factors contributing to districts' fiscal strain, note the authors, but technological changes result from intended shifts in federal or state policies. The authors suggest that current government subsidies to local schools target unintended fiscal strains when they should focus on intended factors. (Author/RW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Not for quotation or attribution;
comments and suggestions are
welcomed.

ED208517

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.
Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

FISCAL STRAIN IN AN ERA OF RETRENCHMENT

Guilbert Hentschke

John Yagielski

1981 Annual Meeting
American Education Research Association
Los Angeles

April 13-17, 1981

EA 014 062

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

G. Hentschke

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Preface

The work presented here is part of a three-year study, the purpose of which is to assess the effects of "fiscal strain" on the politics and governance of school districts. During the initial phases of this study, it became clear that "fiscal strain" (and related phrases like "retrenchment"), though often cited, was not clearly defined or measured. For some district decision-makers it was synonymous with enrollment declines. For others it captured the posture of school districts in response to tax revolts. For still others it meant simply not being able to provide (purchase) the kinds of programs and services heretofore available.

While it was possible to measure changes in enrollments, changes in expenditures, short term debt, and so on, it has been exceedingly difficult to relate these measures to fiscal strain. We are gradually concluding that "fiscal strain" is as much a psychological construct as it is a financial index, and that attempts to measure fiscal strain in school districts must include recognition of expenditure preferences at the local level. If not, the forces which are commonly thought of as inducing fiscal strain merely act to redistribute the combinations of goods and services that are purchased in school districts. This paper represents an attempt to portray fiscal strain as a function of school district preferences and to define and measure those factors contributing to fiscal strain.

FISCAL STRAIN IN AN ERA OF RETRENCHMENT

BACKGROUND

Few issues have captured the imagination of educators more than those surrounding "retrenchment" in school districts. Not unlike an educational "black hole" it has sucked into itself such diverse topics as the study of school district policy making, the analysis of enrollment changes on operating costs, changes in service levels, the impact of inflation, reductions in course offerings, school closings, administrator behavior, and teacher mobility. Despite the variety of subject matter, two phenomena are implicit in each study: (1) conditions over which district decision makers have no direct control change in such a way as to reduce the discretion of district administrators; and (2) the decision alternatives which remain are as a group less preferable than those which were removed. District administrators are forced to choose among progressively less preferable alternatives.

The mechanism which enforces these choices is the balancing equation of revenues and expenditures, i.e., the budget constraint. It is not that districts are legally prohibited from engaging in once legal activities; rather districts are financially prohibited from engaging in once affordable activities. This can happen in one or more of only three ways: changes in volume; changes in the prices of inputs; and changes in "technology" or the manner in which inputs are combined for service.

These arguments are portrayed graphically in exhibits 1-3. District decision-makers have preferences for particular mixes of resources for schooling. The value of one type of input (Resource X) can expressed in terms of the amounts of other inputs (Resource Y) that the decision-maker

is willing to give up in order to gain additional units of Resource X. The perceived value of these tradeoffs can be portrayed graphically as consumer indifference curves. (Viewing the educational decision-maker as a consumer of inputs into the educational process seems to be more realistic than viewing the educational decision-maker as a producer of education for three reasons. First, in the latter case, constant quality must be assumed when in fact constant quality is not assumed in education, nor does there exist a widely agreed upon measure of school quality. Secord, and related to the first, fixed combinations of inputs for a given level of output or quality must be assumed, when in education rates of substitution continually change. Third, like consumers, educational decision-makers have infinite wants with declining marginal utility. Their behavior is not characterized by least cost combinations of inputs, given a level of output. Rather, their behavior is one of utility maximizing, given a budget constraint.)

Three indifference curves are portrayed in Exhibit 1. The curves farther from the axis represent progressively higher quantities of resources consumed. Educational decision-makers would prefer to have more of all resources, but are prevented from doing so by a budget constraint. Not unlike indifference curves, the budget constraint can be thought of in terms of the different combinations of inputs that can be purchased with a given sum of money. The budget constraint portrayed in Exhibit 2, for example, portrays the various combinations of resources X and Y that can be purchased for a fixed sum of money, B.

The educational decision-maker attempts to maximize perceived utility. To do this, the educational decision-maker will select the highest possible indifference curve which is tangent with his budget constraint and consume

Exhibit 1

District Decision Maker's Indifference Curves

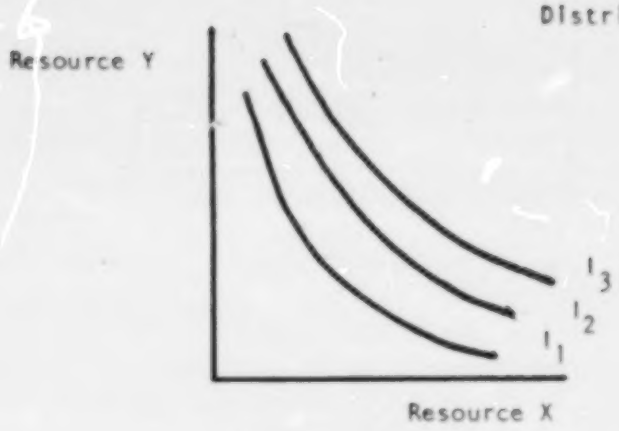


Exhibit 2

District Decision Maker's Budget Constraint

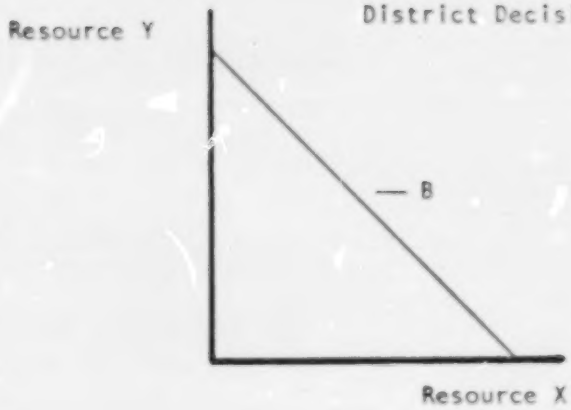
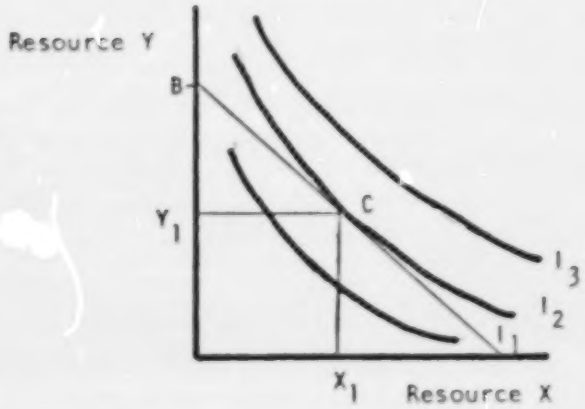


Exhibit 3

Utility Maximization of the Budget Constraint



(purchase) resources X and Y in accord with the point of tangency.

Fiscal strain facing school districts is described within this model of the interaction of preference functions, indifference curves, and budget constraints.

Fiscal Strain Through Enrollment Decline

Fiscal strain can occur in one or more of three ways. Consider first the widely documented relationships between enrollment decline and fiscal strain. Enrollment declines cause fiscal strain through four major cause-effect arguments: increasing fixed costs per pupil, declining staff-pupil ratios, average salary bracket creep, and district wealth bracket creep. Each focuses on a different manifestation of the fact that in the short run, enrollment changes "drive" both expenditures and revenues in school districts. The first three drive up costs facing the district, while the last one acts to drive down revenues. In order to provide a common basis for discussion, the arguments of each are summarized briefly here.

As enrollments decline, the fixed costs per pupil increase, everything else being equal. Many costs of schooling are not totally variable. When a district's enrollment changes from 400 to 399 each of the remaining students "carries" a little more of, for example, the superintendent's salary. Fixed costs per pupil and hence total costs per pupil go up when enrollments decline. Though widely acknowledged, few studies have attempted to derive fixed-variable cost ratios for individual districts. The declining staff-pupil ratio argument is no more than a variation on the fixed-variable argument. The district with 400 pupils and 1 teacher for each of 12 grades that looses one student in each grade, can not very well let a teachaer go. The net effect is a reduction in pupil teacher ratios from 1:33.3 to 1:32.3.

As seniority rules force younger, (less expensive), teachers out of schools (or at least reduces their rate of entry) the average age and expense of staff increases disproportionately. This results in the average teacher salary creeping up the salary schedule.

At the same time the first three factors are at work driving up costs, the fourth factor (district wealth bracket creep) is driving down revenue. School districts across the United States receive about one half of their operating revenues from state and federal governments. This aid is awarded largely on the basis of numbers of children per district (counted either as enrolled in school or attending). Consequently, with fewer pupils the district receives less total financial assistance. In some instances this aid is further reduced because the district appears to be wealthier and hence deserving of less aid. Districts with low amounts of property wealth per pupil usually receive more aid than districts of the same size with greater property wealth per pupil because state governments attempt to equalize revenues available to "rich" and "poor" districts. As a districts enrollment declines, the amount of property wealth available per pupil increases. The district which loses enrollments appears to be richer, although it has only lost pupils, not gained in total property wealth. Because it appears richer, the state automatically provides less state aid per pupil to the district than would have been the case had the district not lost pupils. Because most enrollment driven aid formulates are based on average rather than margiral cost concepts, districts which lose enrollments must resort to retrenchment even though the cause of the retrenchment is educationally unintended by state level decision-makers.

These familiar arguments bring about fiscal strain through various interactions of indifference curves, prices of inputs, and budget constraints. Enrollment declines reduce the educational decision-makers consumption of educational inputs through a reduced budget constraint. Consumption is distorted in this instance because the educational decision-maker can not simply move from the point of tangency of I_1 and B_1 to the point of tangency of I_2 and B_2 (Exhibit 4). Because Resource X is a fixed cost while Resource Y is a variable cost, consumption moves from C_1 to C_3, not to C_2. The fiscal strain in this instance results from the educational decision-maker being forced to consume quantities X_1 and Y_3 rather than X_2 and Y_2.

Fiscal Strain and Price Changes

Increases in price levels cause fiscal strain, because they result in a net decrease in the level of the budget constraint. As shown in Exhibit 5, proportionate increases in the price levels of inputs X and Y reduce the quantities of these resources that can be purchased from combinations lying along B_1 to combinations lying along B_2. The resulting consumption levels of both inputs are forced downward equally, shifting consumption from X_1 to X_2 and Y_1 to Y_2. When the increases in relative prices are not proportional (Exhibit 6), consumption is shifted downward, but relatively greater quantities of the relatively cheaper inputs (Resource Y) are consumed (Y_3 instead of Y_2).

Changes in Technology

Changes in technology can cause fiscal strain if they do not reflect shifts in the indifference curves of local decision-makers. Consider first an instance where district decision-makers change their indifference curves (for any reason). For a given budget constraint they decide to purchase relatively

Exhibit 5

Fiscal Strain from Enrollment Declines

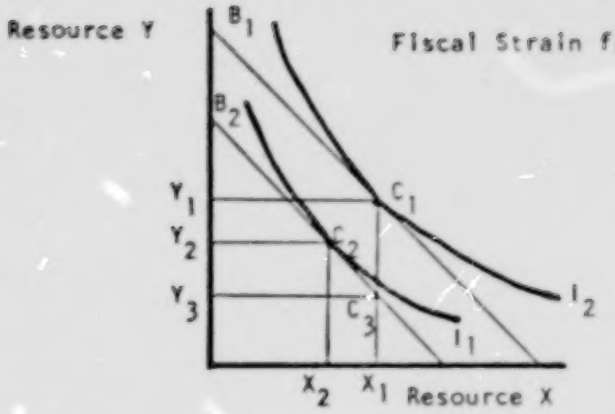


Exhibit 6

Fiscal Strain from Uniform Price Increases

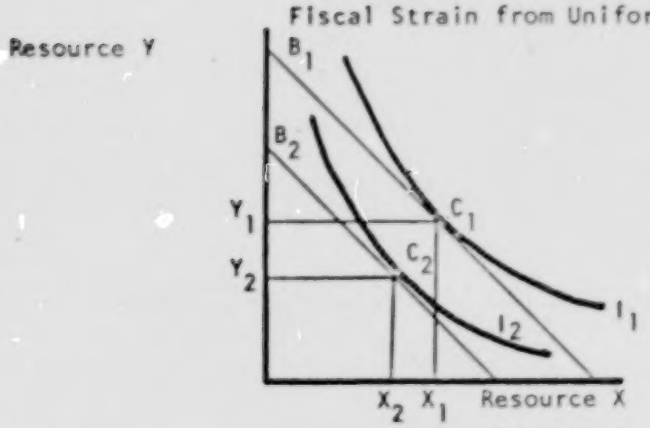
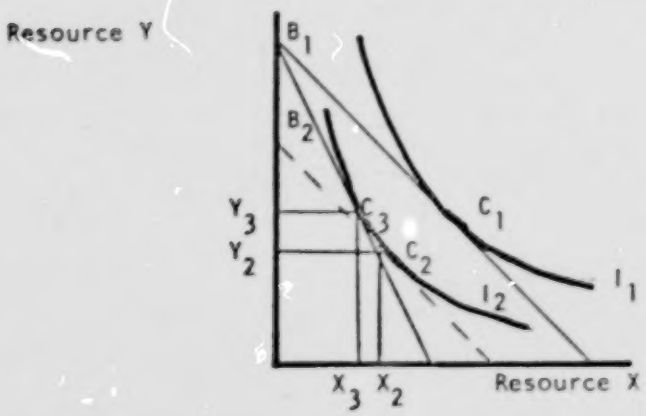


Exhibit 7

Fiscal Strain from Non Uniform Price income



more of one input (Resource X in Exhibit 7) and give up the dollar equivalent of other inputs (Resource Y). As an example, district decision-makers may wish to purchase more teacher aides at the expense of not purchasing other inputs. Fiscal strain is not present, because the level of consumption has not been reduced. Rather, the preferences of district decision-makers have changed, favoring more of Resource X relative to Resource Y.

Relatively few changes in technology result from local preference shifts. Many changes in technology reflect responses to higher levels of educational decisions. State laws which require districts to reduce their maximum class sizes for special groups of students in effect force districts to move from their preferred combination of resources at their budget constraint to some other combination. In Exhibit 8, the district is forced to move from C_1 to C_2, because of an externally imposed change in technology. In the example requiring reduced class sizes for special groups of pupils, the district is forced to buy more of certain types of teachers (X_1 to X_2) at the cost of giving up other resources (Y_1 to Y_2).

Fiscal Strain and Financial Relief

Because fiscal strain emanates from three major causes, discussions of school district "aid" to relieve strain have not proceeded beyond ideosyncratic proposal and aid mechanisms which aid specific types of strain, e.g., declining enrollment aid, energy assistance, special education funding. At least two issues need to be addressed before a coherent policy on financial assistance can be stated. First, what are the relative impacts of the different kinds of strain described here? For example, have changes in enrollment imposed relatively greater fiscal strain on school districts than changes in technology or changes in price levels? A second and more basic question is,

Exhibit 7

Changes in District Decision Maker Consumer Preferences

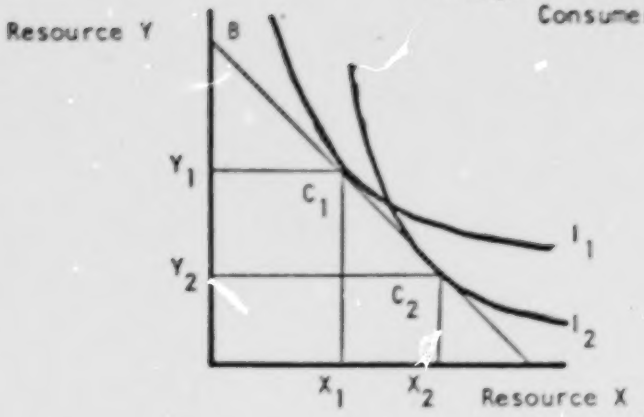
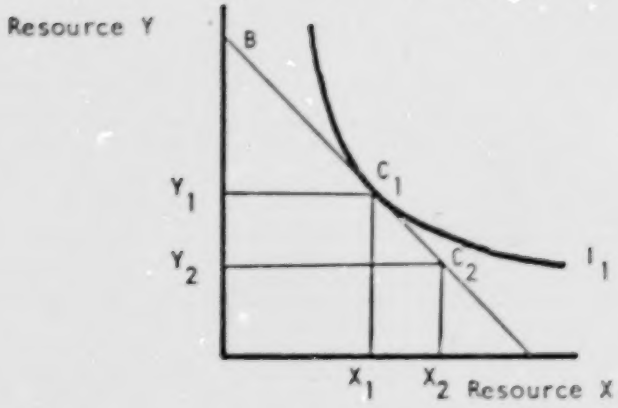


Exhibit 8

Fiscal Strain from Externally Imposed Changes in Techology



should all types of fiscal strain facing school districts be candidates for state and federal financial assistance? We will attempt to address these two questions in the remainder of this paper.

MEASURING THE RELATIVE FISCAL STRAIN IMPOSED BY ENROLLMENT DECLINES, PRICE LEVEL INCREASES, AND CHANGES IN TECHNOLOGY

Little work has been done in education to attempt to isolate the unique effects of enrollments, prices, and technology on fiscal strain. We can certainly make inferences on their combined effects by looking, for example, at changes in per pupil and total costs over long periods of time, by observing the continued decline in pupil-teacher ratios since the end of the 19th Century, or by recording changes in what a starting teacher makes over long periods of time. Despite these efforts we have had difficulty in disentagling the contributions to strain.

In an attempt to measure the effects of each of the three factors on fiscal strain, we have constructed the arguments below.

If district expenditures at a point in time (t) can be expressed as a function of enrollments (N), price levels (P), and technology (T), then it would be possible to evaluate changes in district expenditures between two points in time (say t-1 and t) as a function of changes in enrollments, price levels, and technology.

$$E_t = f(N_t + P_t + T_t)$$

likewise,

$$E_{t-1} = f(N_{t-1} + P_{t-1} + T_{t-1})$$

The change in expenditures (D) between t-1 and t which is attributable to changes in enrollments can be formulated as:

$$D_N = f(N_t + P_{t-1} + T_{t-1})$$

The change in expenditures (D) between t-1 and t which is attributable to changes in price levels can be formulated as:

$$D_P = f(N_{t-1} + P_t + T_{t-1})$$

And the change in expenditures (D) between t-1 and t which is attributable to changes in technology can be formulated as:

$$D_T = f(N_{t-1} + P_{t-1} + T_t)$$

The relative impact on fiscal strain of enrollment declines, price level increases, and changes in technology can then be ascertained by comparing the relative sizes of D_N, D_P, and D_T. Data were gathered from a single school district for two periods in time (1976 and 1980). Enrollments and pupil teacher ratios for the major programs for the two periods are listed in Table 1. Program expenditure information was combined with staffing ratios to develop eleven measures of technology (Table 2). As an example of how technology was defined, the first row entry on Table 2 reads as follows:

> For the K-6 program, a total of $5,990,000 was spent in 1976. For every 28.5 students in this program, $25,200 was spent. In 1980, $8,016,000 was spent on this same program. For every 25.2 students, $35,300 was spent.

By referring back to Table 1, we know that 6772 students were served in this program in 1976 in classes where the pupil teacher ratio was 28.5. In 1980, 5830 students were served in this program in classes where the pupil teacher ratio was 25.2. Similar price and technology factors were developed for the other major categoreis of expenditure of the school district.

Total expenditures captured by this particular formulation were $27,457,000 in 1976 and $40,696,000 in 1980. Actual expenditures in the district were higher by several million dollars in both periods, reflecting expenditures for debt service, tuition, and fund transfers which had been excluded. The

Table 1

ENROLLMENT AND STAFF DEPLOYMENT 1976-1980

		1976			1980		
		Students	Teachers	Ratio	Students	Teachers	Ratio
Enrollments	K-6	6772	238	28.5	5830	231	25.2
	7-8	2056	113	18.2	1914	105	18.3
	9-12	4244	227	18.7	4069	232	17.5
	Special Education	141			230		
		13,213			12,043		
	Guidance	6,300	18	350.0	5,983	19	315.0

		1976	1980
Buildings	K-6	13	13
	7-8	3	3
	9-12	2	2

Table 2

Price Levels and Technology 1976-1980

		1976 Expenditures ($000's)		1980 Expenditures ($000's)	
		Total	Per Unit	Total	Per Unit
Student Determinants	K-6	$5,990	$ 25.2/28.5 students	$8,160	$ 35.3/25.2 students
	7-8	$2,632	$ 23.3/18.2 students	$3,553	$ 32.8/18.3 students
	9-12	$5,677	$ 25.1/18.7 students	$8,327	$ 35.9/17.5 students
	Guidance	$ 533	$ 30.7/350 students	$ 815	$ 42.9/315 students
	Special Education	$ 770	$ 5.5/ students	$1978	$ 8.6/ students
	Transportation	$1,241	$ 9.4/100 students	$2,454	$ 20.4/100 students
School Determinants	K-6	$2,558	$136.8/building	$3,594	$276.5/building
	7-8	$ 676	$225.3/building	$ 761	$380.5/building
	9-12	$1,945	$648.3/building	$2828	$942.7/building
	Facilities	$2,190	$109.5/facility	$3,355	$167.8/facility
District Operation		$3,225		$4,871	
Total		$27,457		$40,696	

subsequent step in the analysis was to determine how much influence each of the three factors had on the increase between the $27.4 million in 1976 and the $40.6 million in 1980.

The effects of changes in enrollments on changes in total costs are portrayed in Table 3. Enrollments for 1980 were combined with 1976 technology and 1976 prices, and total expenditures dropped from $27, 457, to $26,427. (Real per pupil expenditures increased from $2078 to $2194.)

The effects of changes in price levels on changes in total costs are portrayed in Table 4. Price levels in 1980 were combined with 1976 technology and 1976 enrollments, and total expenditures rose from $27,457 to $38,487.

The effects of changes in technology on changes in total costs are portrayed in Table 5. Technology existing in 1980 was combined with 1976 price levels and 1976 enrollments. As a result total expenditure rose from $27,457 to $30,404. Relative effects are summarized in Table 6.

Because both the theoretical framework and the methodology of this study are exploratory at this stage, generalizations must of necessity be tenative. The findings do, however, suggest several possibilities. First, the impact on fiscal strain of declining enrollments supports the outlook of the Commission on Declining Enrollments of Canada:

> The main challenges facing the people who make decisions for our education systems do not come from declining enrollments, but from the economic and public finance conditions that characterize the late 1970's and promise to be facts of life for some years to come. These conditions make it difficult to accomodate decreasing enrollments, but they are also conditions that would have made it far more difficult to accomodate increasing enrollments.

Second, price level changes are by far the greatest factor affecting fiscal strain.

Third, changes in technology account for a sizeable proportion of the fiscal strain felt in this district.

Table 3

EFFECTS OF CHANGES IN ENROLLMENTS ON

TOTAL COSTS 1976-1980

		1980 Enrollment ÷ 1976 Technology	1976 Rates ($000's)	Costs ($000's
Student Determinants	K-6 (5830/28.5)	205	$25.2	$5166
	7-8 (1914/18.2)	106	$23.3	$2470
	9-12 (4069/18.7)	218	$25.1	$5472
	Guidance (5983/350)	18	$30.7	$ 553
	Special Education	230	$ 5.5	$1265
	Transportation	102.43	$ 9.4	$1132
School Factors	K-6	13	$196.8	$2258
	7-8	2	$225.3	$ 451
	9-12	3	$648.3	$1945
	Facilities	20	$109.5	$2190
District Operation		-	$3225	$3225
				$26,427

Table 4

EFFECTS OF CHANGES IN PRICE LEVELS

ON TOTAL COSTS 1976-1980

		1976 Rates ($000's)	1980 Rates @ 1.4 ($000's)	1976 Enrollments (1976 units)	Cost ($000's)
Student Determination	K-6	$25.2	$35.3	238	$8401
	7-8	$23.3	$32.6	113	$3684
	9-12	$25.1	$35.1	227	$7968
	Guidance	$30.7	$42.9	18	$ 777
	Special Education	$ 5.5	$ 7.7	141	$1086
	Transportation	$ 9.4	$13.2	132.13	$1744
School Factors	K-6	$196.8	$275.5	13	$3582
	7-8	$225.3	$315.4	3	$ 946
	9-12	$648.3	$907.6	3	$2723
	Facilities	$109.5	$153.3	20	$3066
District Operations		$3225	$4515	-	$4515
					$38,487

16

Table 5

EFFECTS OF CHANGES IN TECHNOLOGY

ON TOTAL COSTS 1976-1980

		1976 Enrollments (1980 units)	1976	Cost ($000's)
Student Determinants	K-6 (6772/25.2)	269	$25.2	$6779
	7-8 (2056/18.3)	113	$24.1	$2723
	9-12 (4244/17.5)	243	$25.6	$6221
	Guidance (6300/315)	20	$30.6	$ 612
	Special Education	141	$ 6.1	$ 830
	Transportation	132.13	$14.6	$1929
School Factors	K-6	13	$197.5	$2568
	7-8	3	$271.8	$ 815
	9-12	3	$675.4	$2020
	Facilities	20	$119.9	$2398
District Operation		-	$3479	$3479
				$30,404

Table 6

COMPARING THE RELATIVE EFFECTS OF

ENROLLMENT, TECHNOLOGY, AND PRICE LEVEL CHANGES

			1976-1980		
ENROLLMENT	1976	1976	1976	1980	1980
TECHNOLOGY	1976	1976	1980	1976	1980
PRICE LEVEL	1976	1980	1976	1976	1980
TOTAL COST ($000's)	$27,457	$38,487	$30,404	$26,427	$40,696
DIFFERENCE '76 ($000's)		$11,030	$ 2,947	$(1030)	$13,239
COMBINED EFFECTS ($000's)					$12,947
MEASUREMENT ERROR ($000's)					$ 292

What do these findings suggest for the manner in which school districts are aided by state and federal levels of government? We think that one consideration lies in being able to distinguish between "intended" and "unintended" factors contributing to fiscal strain.

FISCAL STRAIN AS A COMPOSITE OF "INTENDED" AND "UNINTENDED" INDUCEMENTS TO CHANGE CONSUMPTION PATTERNS IN SCHOOL DISTRICTS

Fiscal strain is caused by a combination of factors. Reductions in volume drive up unit fixed costs and reduce total revenues. Increases in the relative prices of some inputs will cuase some substitution of that input for less expensive alternatives. Externally imposed changes in technology will, by definition, shift resources from preferred alternatives (absent of external funding for the entire cost of the change). In all cases the budget constraint facing the district forces it to forego certain once preferred school inputs, i.e., to "retrench."

As a consequence of widely held beliefs by many educators, many of these factors which contribute to fiscal strain are also candidates for financial assistance from state and federal governments to school districts. Many states are compensating districts for losses in enrollments, increases in energy costs, the incidence of children with special needs, density of population, sparsity of population, etc.

Although all of these factors have the common characteristic of not being directly controllable by district level decision-makers, they differ from each other in the degree to which they are preferences of higher levels of education decision-makers. State and federal mandates for schools are "purposeful", i.e., they are <u>designed</u> to override the preference functions of local school districts. It is assumed that state and federal preference

functions (imposed on school districts in the form of laws and regulations) will yield a "greater good", whether they deal with required instructional programs, audit of pupil transportation records, class size and teacher certification requirements for special education, energy conservation, bid laws, or regulations on voting and elections, etc.

These and other externally imposed mandates reflect deliberate attempts within the system of public education to "improve" public education, and are distinguishable from other factors over which local school districts have no direct, short-run control such as enrollment changes and price changes. For brevity, we can label the deliberately imposed changes as "educationally intended", and those not deliberately imposed as "educationally unintended."

To the extent that "educationally intended" factors actually shift local allocation decisions, state and federal education preferences will over-ride local preferences. (In this argument it is not necessary to assume that state and federal mandates are "better"-- only to assume that they reflect the preferences of state and federal education decision-makers.)

To the extent that "educationally unintended" factors shift local allocation decision, neither state or local preferences predominate. To the extent this is so, fiscal strain at the school district level has both desireable and undesireable effects from the perspective of state and federal level educational decision-makers as well as local decision-makers. Forcing a local school district to allocate more resources to economically and educationally disadvantaged students may be seen as a "greater good" by state and federal educational decision-makers. Because it forces districts to allocate resources in ways more preferred by state and federal educational decision-makers, it would not be seen as such by district level decision-makers. (Were it a preferred alternative district decision-makers would already be allocating

more resources to such students.) Similarly, state and federal educational decision-makers perceive a greater good in requiring local districts to limit class size for certain groups of students. Again, if local decision-makers agreed, they would already have limited class size prior to the mandate. The shift is "intended."

Consider, on the other hand, educationally unintended forces, e.g., forces to allocate resources in less preferred ways due to price increases. No educational decision-maker within the education system perceives a greater educational good in, for example, paying 30% more for fuel than the previous year especially when those additional dollars must be taken from more preferred uses. One could argue that not only are the preference functions of local districts restricted thereby, but that the preference functions of state and federal educational decision-makers are restricted as well.

From the standpoint of local district decision-makers, the fiscal effect of "eduationally intended" and "educationally unintended" factors is identical. It matters not whether retrenchment is caused by externally imposed mandates which change the technology of the district, by enrollment declines, or by price changes. In all instances, additional resources must be committed to some activities and withheld from others resulting in a less desireable bundle of education services as perceived locally.

Within this formulation of fiscal strain, the fiscal effects of enrollment decline are "educationally unintended." State and federal educational decision-makers perceive that no "greater good" is served by districts who lose enrollments. Neither is a "greater good" served by districts which pay more for utilities.

Alternatively, a "greater good" is perceived by state and federal educational decision-makers to exist by having school districts spend more

on certain programs than the district currently spends. This is accomplished by the enactment and enforcement of state and federal statutes.

To the extent that the unintended contributors of fiscal strain are subsidized, neither local nor state and federal consumption preferences are directly encouraged. How many more school buildings would have been closed over the last decade if major fuel subsidies or enrollment loss subsidies had not been granted to school districts? Alternatively, how much more effectively would the intended contributors of fiscal strain shifted consumption patterns if they had been subsidized to a greater degree? Examples in the sample district include mandated and underfunded programs related to the implementation of competency testing, Title IX, special education, compensatory education, and career education.

Intended changes appear to be largely reflected in changes in technology whereas the unintended changes appear largely in the areas of price level changes and enrollment changes. To the extent that unintended changes cause fiscal strain and are not subsidized, districts will adapt through changing consumption patterns, consuming less of higher priced resources. State and federal educational decision-makers would prefer rapid response to the unintended changes, because it permits districts to shift resources toward the intended changes. But this is not the case.

In the case of the sample district, enrollment declines (unintended changes) are highly subsidized, while many intended changes are either not subsidized or partially subsidized. The district has no incentive to retain students, and has no incentive to shift consumption patterns to align with intended changes beyond enforceable minimums.

For this reason, it appears to us that current aid mechanisms may not be serving the consumption preferences of either state and federal or

school district educational decision-makers as well as they might aid mechanisms tied more directly to intended changes would yield greater "consumer satisfaction" on the part of educational decision-makers at all levels, especially the state and federal level.